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July 17, 2002

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VIA HAND DELIVERY

Janice Myles Policy and Planning Division Wireline Competition Bureau Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

REDACTED - FOR PUBLIC INSPECTION

Re: Diskette Copy of Comments in CC Docket Nos. 01-338, 96-98, and 98-147; Comments of El Paso Networks, LLC and CTC Communications Corp.

Dear Ms. Myles:

Enclosed please find a disk that includes an electronic file of the Reply Comments jointly filed by El Paso Networks, LLC and CTC Communications Corp. (collectively, "Dark Fiber Commenters") in CC Docket Nos. 01-338, 96-98, and 98-147 on July 17, 2002. The Comments are in Microsoft Word format and submitted in read-only mode.

Please do not hesitate to contact us if you have any questions concerning this matter.

Very truly yours,

Eric J. Branfman Joshua M. Bobeck Edward W. Kirsch

Counsel for El Paso Networks, LLC and

CTC Communications Corp.

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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554



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In the Matter of) PROBERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers) CC Docket No. 01-338
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996)) CC Docket No. 96-98)
Deployment of Wireline Services Offering Advanced Telecommunications Capability) CC Docket No. 98-147

REPLY COMMENTS OF EL PASO NETWORKS, LLC, AND CTC COMMUNICATIONS CORP. (COLLECTIVELY "DARK FIBER COMMENTERS")

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July 17, 2002

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Carriers)	
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Implementation of the Local Competition)	
Provisions of the Telecommunications Act of)	CC Docket No. 96-98
1996)	
)	
)	CC Docket No. 98-147
Deployment of Wireline Services Offering)	
Advanced Telecommunications Capability)	

REPLY COMMENTS OF EL PASO NETWORKS, LLC, AND CTC COMMUNICATIONS CORP. (COLLECTIVELY "DARK FIBER COMMENTERS")

CTC Communications Corp. ("CTC") and El Paso Networks, LLC ("EPN") (collectively the "Dark Fiber Commenters") submit these Reply Comments in response to the Federal Communications Commission's ("Commission") above-captioned notice of proposed rulemaking¹ ("NPRM") initiating a Triennial Review of the Commission's policies regarding the unbundled network elements ("UNEs") that incumbent Local Exchange Carriers ("ILECs") are

In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-339, Notice of Proposed Rulemaking, FCC 01-361, at ¶ 61 (rel. Dec. 20, 2001) ("Triennial UNE NPRM").

required to provide to requesting carriers pursuant to Sections 251(c)(3) and 251(d)(2) of the Telecommunications Act of 1996 ("1996 Act").²

I. INTRODUCTION

On May 24, 2002, a panel of the Court of Appeals for the District of Columbia Circuit released a decision that, among other items, remanded the Commission's order³ implementing the unbundling provisions of the Act, including the Commission's implementation of the "impair" test in section 251(d)(2) of the Act that is used to determine which non-proprietary network elements ILECs are required to provide to competitive local exchange carriers ("CLECs").⁴ In response to the *USTA Decision*, EPN has joined with other CLECs and has set forth its proposed implementation of the "impair" standard of section 251(d)(2) in section VII of the Reply Comments of the Joint CLECs. Accordingly, in order to avoid unnecessary repetition, section VII of the Reply Comments of the Joint CLECs is hereby incorporated into these Reply Comments of the Dark Fiber Commenters by reference.

EPN and CTC, the Dark Fiber Commenters, focus their reply comments on unbundled dark fiber for several reasons. First is that continued unbundled access is critical to the continued success of their respective business plans. More importantly is that dark fiber is a unique network element. It is simply the raw transmission capability deployed by the ILEC and is the hardest element in the network to duplicate. In order to use the raw transmission capability a

² Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, codified at 47U.S.C. §§ 251 et seq.; see 47 U.S.C. §§ 251(c)(3) and 251(d)(2).

³ Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, FCC 99-238, 15 FCC Rcd 3696 (Rel. Nov. 5, 1999) ("UNE Remand Order").

United States Telecom Ass'n v. FCC, 290 F.3d 415 (D.C. Cir. 2002) ("USTA Decision"). On July 8, 2002, the Commission filed a Petition for Rehearing or Rehearing En Banc regarding the USTA Decision.

CLEC must invest significant sums of capital to deploy the equipment that transforms the raw capacity to "lit" capacity and allows the CLEC to provide telecommunications service. With such investments in facilities, CLECs can gain a measure of control over the network and can innovate. As an example, when EPN began using unbundled dark fiber from SBC in Texas, EPN deployed DWDM to increase its capacity, before SBC rolled out DWDM for its customers. Likewise EPN deployed state of the art SONET multiplexing equipment that provides greater flexibility in deploying SONET service compared to the equipment SBC has deployed in Texas. The ability to innovate and control the capacity on the network are important factors guiding CLECs in determining whether to invest in facilities-based competition. Because unbundled dark fiber requires such investment in order to use the UNE, it s unique among UNEs and comes closest to full facilities based competition.

In section II of these Reply Comments, the Dark Fiber Commenters respond to the arguments raised by the ILECs in their initial Comments. Further, in sections III and IV of these Reply Comments the Dark Fiber Commenters demonstrate that even under the most rigorous interpretation of the section 251(d)(2) impair standard and the *USTA Decision*, the ability of CLECs to provide services is materially diminished by the lack of unbundled access to dark fiber loop and transport network elements in light of the limited availability of alternative fiber and the relative cost, relative timeliness of deployment, relative quality, and impact on network operations associated with the use of alternative network elements. Accordingly, the Commission should continue to require ILECs to provide unbundled dark fiber loops and transport at TELRIC rates. Finally, in section V of these Reply Comments, the Dark Fiber Commenters establish that the ILECs have exploited ambiguities in the Commission's existing rules regarding dark fiber in order to systematically deny CLECs access to existing unbundled

dark fiber loops and transport under the Commission's current rules. Accordingly, the Commission should close these loopholes and adopt additional rules regarding the terms and conditions pursuant to which ILECs must provide access to unbundled dark fiber loops and transport. In particular, those rules should address the requirement that unbundled dark fiber includes unspliced and unterminated fiber, that ILECs must splice and terminate such fiber for the CLEC, and ILECs must provide CLECs nondiscriminatory access to information regarding the location of dark fiber.

To further assist the Commission in its analysis and reach the inevitable conclusion that CLECs remain impaired without access to dark fiber on an unbundled basis, the attached to these comments is a report prepared by El Paso Networks. This report provides factual data and economic analysis for markets in Texas that are reflective of other markets around the nation.

The data and economic analysis of that data, sworn to by the contributors to the report, demonstrates that CLECs remain impaired without unbundled access to dark fiber.⁵

- II. CONSISTENT WITH ITS CONCLUSION IN THE UNE REMAND ORDER THE COMMISSION SHOULD DETERMINE THAT CLECS ARE IMPAIRED IN THEIR ABILITY TO PROVIDE SERVICES ABSENT ACCESS TO UNBUNDLED DARK FIBER LOOPS AND TRANSPORT
 - A. Unbundled Dark Fiber Loops And Transport Are A Necessary Tool For Facilitating Increased Competition And Investment In Competitive Network Facilities

The ILECs argue that the Commission should remove loops and transport, including dark fiber, from its list of UNEs, ostensibly because the Commission's unbundling requirements are a disincentive for ILECs and CLECs to invest capital in new facilities. For example, SBC claims

⁵ Because of the sensitive nature of the source material for the report, the Dark fiber Comments have filed the Dark fiber Impair Analysis with a request for Confidential treatment.

that "[s]uch policies destabilize facilities-based competition by making it more difficult for them to win the market share necessary to cover their costs and to justify new investment so much so that SBC has substantially scaled back deployment of Next Generation Digital Loop Carriers ("NGDLC") and is thinking twice about rolling out successor technologies – such as Broadband Passive Optical Networks ("BPON") – for fear that they too will be swept up in a mandatory sharing regime." Likewise Verizon argues that "[a]s long as unbundled high capacity loops are available at artificially low TELRIC rates, CLECs will *choose* to purchase such facilities rather than deploying their own in certain circumstances."

The ILECs raised this same tired argument before the Supreme Court in *Verizon v. FCC* claiming that the FCC's UNE policy "perversely creates incentives against competition in fact . . [because] TELRIC sets rates so low that entrants will always lease and never build network elements." The Supreme Court categorically rejected this ILEC argument in the course of upholding the Commission's TELRIC pricing rules and observed that "actual investment in competing facilities since the effective date of the Act simply belies the no-stimulation argument's conclusion." In fact, even the data provided by the ILECs indicates that CLECs have made and continue to make substantial investments in their own facilities notwithstanding the availability of unbundled network elements.

⁶ Comments of SBC Communications, Inc., CC Dockets No. 01-338, 96-98, 98-147 at iv (April 5, 2002) ("SBC Comments").

Comments and Contingent Petition For Forbearance of the Verizon Telephone Companies, CC Dockets No. 01-338, 96-98, 98-147 at 122 (April 5, 2002) ("Verizon Comments").

Verizon Communications, Inc., et al. v. Federal Communications Commission, Nos. 00-511 et al., 535 U.S., 2002 WL 970643, at *20 (May 13, 2002) (herein after "Verizon v. FCC").

⁹ Verizon v. FCC, at *20.

More specifically, the Supreme Court concluded that, "[a]t the end of the day, theory aside, the claim that TELRIC is unreasonable as a matter of law because it simulates but does not produce facilities-based competition founders on fact." The Supreme Court was notably impressed that the new "entrants have presented evidence that they have invested in new facilities to the tune of \$55 billion since the passage of the Act." Further, the Supreme Court underscored that the FCC's own statistics "indicate substantial resort to pure and partial facilities-based competition" and observed that "as of June 30, 2001, 33 percent of entrants were using their own facilities" and 44 percent were leasing network elements (26 percent of entrants leasing loops with switching; 18 percent without switching)." The Supreme Court concluded the ILECs failed to rebut the CLECs' evidence regarding their substantial investment in facilities and "merely speculate that the investment has not been as much as it could have been" absent unbundling. Finally, the Supreme Court concluded that an unbundling regulatory scheme "that can boast such substantial capital spending over a 4-year period is not easily described as an unreasonable way to promote competitive investment in facilities."

Moreover, this Commission fully considered investment incentive issues in establishing the Commission's unbundling test and astutely concluded that "the unbundling rules that we adopt in this [UNE Remand] proceeding seek to promote the development of facilities-based

¹⁰ Verizon v. FCC, at *26.

¹¹ Verizon v. FCC, at *26.

Verizon v. FCC, at *26 (paraphrasing the FCC's Local Competition Report: Status as of June 30, 2001, at 2 (Feb. 27, 2002)).

¹³ Verizon v. FCC, at *26.

¹⁴ Verizon v. FCC, at *26.

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competition." In fact, this Commission concluded that the ability of requesting carriers to use

unbundled network elements, including various combinations of network elements, is a

necessary precondition to the subsequent deployment of self-provisioned network facilities." ¹⁶

The ILECs have proffered no evidence in this proceeding that would alter the Supreme

Court's view expressed in Verizon v. FCC and this Commission's wholly consistent view

expressed in the UNE Remand Order, that unbundling is a viable means of promoting capital

investment. In fact, the ILEC's own data indicates that the availability of UNEs, far from being

an obstacle, actually fosters facilities based competition. For example, SBC states that "CLECs

now serve more lines by using entirely their own facilities . . . than they do by relying entirely

on ILEC networks (through resale or UNE platforms)."17

Far from impeding investment in facilities the availability of UNEs, including dark fiber

loops and transport, promotes facilities investment by new entrants because UNEs facilitate a

"transitional" strategy that enables CLECs to lease certain network elements in some geographic

areas while they invest in other network elements in other areas, or a "smart-build" strategy in

which CLECs self-provision some network elements such as switches while leasing other cost

prohibitive network elements such as fiber loops, until the CLECs have sufficiently expanded

their customer base and achieved economies of scale to justify deploying their own facilities to

replace the leased network elements. Using these approaches EPN has invested over \$500

million in equipment, collocation space, and its own fiber in Texas while supplementing its

UNE Remand Order, at 7.

UNE Remand Order, at 5 (emphasis added).

UNE Fact Report 2002, at I-1 (April 2002) ("UNE Fact Report"). The UNE Fact Report was prepared

for and submitted by BellSouth, SBC, Owest, and Verizon, collectively the "RBOCs."

7

network with unbundled dark fiber loop and transport network elements.¹⁸ Similarly, CTC has invested over \$180 million in equipment, property, collocation and its 8,200 fiber route mile network in the northeastern United States while relying on unbundled dark fiber in areas with relatively low customer density, such as smaller New Hampshire cities, to supplement CTC's own facilities.¹⁹ These approaches to network deployment were envisioned by Congress in fashioning the Act. As previously observed by this Commission, Congress expressed implicitly through section 251 and the section 271 competitive checklist "Congress's expectation that new competitors would use unbundled network elements from the incumbent LEC until it was practical and economically feasible to construct their own networks."²⁰

The Dark Fiber Commenters have a preference for deploying their own facilities or obtaining facilities from alternative providers because, *inter alia*, as recognized by this Commission, "it is only through owning and operating their own facilities that competitors have control over the competitive and operational characteristics of their service." However, alternative facilities are most often not available and, as this Commission has consistently recognized, no new entrant can possibly duplicate over-night the ubiquitous facilities deployed by the ILECs during the decades of state-sanctioned monopoly, and the resultant advantages of

Attachment A, El Paso Networks, LLC, Texas Specific Necessary and Impair Analysis – 2002, July 2002, at iii, 5 ("EPN Texas Report"). The EPN Texas Report, enclosed as Attachment A, contains an analysis of the wholesale market for dark fiber loop and transport facilities in the four major metropolitan areas of Texas (Austin, Dallas-Fort Worth, Houston, San Antonio) in which EPN provides services.

Attachment C, CTC Communications Corp., Declaration of R. Oliver, at ¶ 3 (July 16, 2002) ("R. Oliver Declaration"). A map showing CTC's approximately 8,200 fiber route mile network is provided as Attachment B.

UNE Remand Order, at 6.

UNE Remand Order, at 6.

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economies of scale, scope and ubiquity.²² As this Commission has underscored, these competitive advantages were not earned by the ILECs, but rather were "obtained by the incumbents by the virtue of their status as government-sanctioned and protected monopolies."²³ During the period of monopoly providers, ILEC facilities deployment was financed with a captive rate base and guaranteed rate of return. The CLECs simply have not had sufficient time and capital, during the mere six years since local competition was permitted, to duplicate the ILEC's ubiquitous loop and transport facilities, including dark fiber facilities, developed over a period of decades in a monopoly environment. Thus, the inability of CLECs to obtain unbundled loops and transport, including dark fiber, from an ILEC will materially increase a CLEC's costs by either forcing it to purchase a far more expensive substitute or to self-provision the element at an even higher cost because it lacks the economy of scale of the ILEC and faces other impediments. The higher cost will reduce the funds available for the CLEC to extend and upgrade its network, and, thus, preclude its ability to achieve the economies of scale of the ILEC.²⁴ In many instances alternative fiber facilities are simply not available and the costs of self-provisioning are so high in light of the market share likely to be captured by the CLEC that self-provisioning of fiber loops and transport clearly is not economically viable.

In sum, the Supreme Court correctly concluded that the ILECs are simply wrong as a matter of fact in arguing that mandatory unbundling has thwarted facilities based competition.

Contrary to their unfounded assertions, unbundled loop and transport, including dark fiber, form

In the Matter of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-325, First Report and Order, 11 FCC Rcd 15,499, at ¶ 11 (1996) ("First Local Competition Order"); UNE Remand Order, at 25, 86.

UNE Remand Order, at 86.

²⁴ UNE Remand Order, at ¶ 84, n. 145.

an integral part of a viable "smart build" market entry strategy, transitional market entry strategy, and other market entry strategies that have enabled many CLECs to supplement their networks where economically efficient while still collectively investing over \$55 billion in deployment of their own facilities.²⁵

As the Supreme Court underscored, the Act "proceeds on the understanding that incumbent monopolists and contending competitors are unequal." ILECs were encouraged to deploy their own networks at their own speed, while protected from competition in a monopoly environment, and with a guaranteed rate of return for many years. As this Commission astutely observed, the ILECs "still enjoy cost advantages and superiority of economies of scale, scope and ubiquity as a result of their historic, government-sanctioned monopolies." These competitive advantages were not earned by the ILECs and this Commission has wisely determined that these economies of scale and scope should be shared with competitors. Moreover, this Commission correctly observed that:

These economies are now critical competitive attributes and would belong unquestionably to the incumbent LECs if they had 'earned' them by superior competitive skills. These advantages, however, were obtained by virtue of their status as government-sanctioned and protected monopolies. We believe that these government-sanctioned advantages remain barriers to the requesting carrier's ability to provide a range of services to a wide array of customers, and that their

The RBOCs concede in their UNE Fact Report that CLEC investments to date amount to at least \$50 billion. UNE Fact Report, at I-10 ("CLECs have invested about \$50 billion in new capital expenditures since the time of the last UNE review three years ago.").

²⁶ Verizon v. FCC, at *34.

²⁷ UNE Remand Order, at ¶ 86.

First Local Competition Order, at ¶ 11 ("the local competition provisions of the Act require that these economies be shared with entrants").

existence justifies placing a duty on the incumbent carriers to share their network facilities.²⁹

In light of these barriers to entry, the Act mandates unbundling of network elements to level the playing field as one of three strategies that a potential competitor may pursue. Otherwise, as the Supreme Court observed, a "newcomer could not compete with the incumbent carrier to provide local service without coming close to replicating the incumbent's entire existing network, the most costly and difficult part of which would be laying down the 'last mile' of feeder wire, the local loop." The FCC recognized three years ago, as did the Supreme Court more recently, that duplication of the ILECs ubiquitous network is impractical in the near term. Accordingly, the FCC concluded in the *UNE Remand Order* that ILECs must unbundle loops and transport, including dark fiber loops and transport. Nothing has changed to alter these conclusions in the intervening three years since the FCC reached this sensible conclusion. The ILECs have offered no evidence that alters this conclusion today.

B. The Availability of UNEs Promotes CLEC Deployment of Advanced Networks And Does Not Significantly Reduce ILEC Incentives To Invest In Facilities

SBC, Verizon and other ILECs call upon the Commission to exclude new ILEC investments from their unbundling obligations because they allege unbundling deters new investment. For example, SBC argues that the Commission should "exclude from the ambit of UNE regulation all new investment . . . this means carving out ILEC packet networks, as well as

UNE Remand Order, at ¶ 86 (emphasis added).

Verizon v. FCC, at *34.

³¹ UNE Remand Order, at ¶ 167, 174, 196-199, 325-27, and 349-52.

all 'green field' investment." "not just the packet switches themselves, but the transmission facilities that connect them, along with all associated electronics." ³²

SBC's plans to scale back Project Pronto and the plans of the other ILECs to reduce capital expenditures result primarily from uncertain consumer demand for broadband and the general economic decline faced by all competitors. Contrary to the ILECs' position regarding investment disincentives, this Commission concluded in its Third Advanced Services Report that "investment in infrastructure for most advanced telecommunications markets remains strong, even though the pace of investment trends has generally slowed." Moreover, the Commission observed that any recent slowdown in investment "may be due in part to the general economic slowdown in the nation." This Commission also observed that "there has been appreciable growth in the deployment of high-speed services to residential and small business consumers in the past eighteen months," resulting in "a total of approximately 7.8 million high-speed (including advanced services) residential and small business subscribers, as of June 2001." In fact, in an extremely short period of time broadband infrastructure has been rapidly deployed so that broadband facilities now reach approximately 81% of American households; however, the

³² SBC Comments, at iv.

See, Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Third Report, CC Docket No. 98-146, FCC 02-33, at 5-6 (rel. Feb. 6, 2002) ("Third Advanced Services Report") (emphasis added). The Commission recently defined "advanced services" "to describe facilities with an upstream (customer-to-provider) and downstream (provider-to-customer) transmission speed of more than 200 kbps." Third Advanced Services Report, at 4. The Commission defined "high-speed" services to "describe services with over 200 kbps capability in at least one direction." Third Advanced Services Report, at 5. The terms "broadband services" and "high-speed services" are used generally interchangeably in these Reply Comments.

Third Advanced Services Report, at 6, ¶¶ 62, 71, 89 (emphasis added).

Third Advanced Services Report, at 5.

consumer take rate is less than 15% of these households.³⁶ Analysts estimate that as of the first quarter of 2000, "81 percent of households had available DSL or cable modem service" and by 2005 that figure will rise to 94 percent of all households.³⁷ Investment in broadband infrastructure has increased rapidly, for example, in 2000, the cable industry invested a total of \$15.5 billion on the construction of new plant and equipment, resulting in a 45.9 percent increase in investment over 1999.³⁸ In fact, one analyst estimates that by 2003 "substantially all of the U.S. cable infrastructure" will have been upgraded "to enable the delivery of new bandwidth-intensive services." Similarly, wireline carriers have invested heavily in the deployment of DSL technologies. In 2000, ILECs "invested almost \$29.4 billion in infrastructure," with a substantial portion of this investment going towards high-speed or advanced services.⁴⁰ CLECs invested about \$22.6 billion in 2000, and invested an estimated \$14.2 billion in 2001.⁴¹

In short, if there is a broadband problem, and this Commission has determined no such problem exists, it is a demand side issue, not a supply side issue (except possibly in rural areas where the RBOCs are minimizing their presence). Demand has lagged supply because most consumers do not have a compelling reason to switch from narrowband to more expensive

Lackluster Demand, Not Regulation, Said to Slow Broadband, Internet Daily, at 5-6 (May 23, 2002) (The argument that ILECs have barriers to deployment is false. According to Rep. Markey (D-Mass.), the problem is that only 15% of those with access to broadband actually subscribe, with most declining because of limited content.); see, Third Advanced Services Report, at ¶ 119 ("Our data indicates that 7.0 percent of American households subscribe to high-speed services. This is a substantial increase from the 1.6 percent residential penetration rate cited in the Second Report. By comparison, analysts estimate that high-speed Internet access is available in about 75 percent to 80 percent of US households via DSL and cable modem service.").

Third Advanced Services Report, at ¶ 61 (paraphrasing Morgan/McKinsey Broadband Report, at 43).

Third Advanced Services Report, at ¶ 65.

Third Advanced Services Report, at ¶ 65.

Third Advanced Services Report, at ¶ 69.

⁴¹ Id.

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broadband connections due to the lack of compelling new applications and a steep learning curve for consumers. Although analysts "predict that new and unforeseen capacity hungry applications that require advanced services platforms will drive demand, and in turn deployment, in the future," these applications have yet to materialize. The failure of new bandwidth hungry applications such as video-on-demand to materialize is probably due more to copyright and piracy concerns than any other factor as these concerns have deterred content owners from making digital copies of their intellectual property available as easily pirated streaming audio and video streams. 43

The Commission was correct when it underscored in its Third Advanced Services Report that there is no Broadband deployment problem as such services "are being deployed in a reasonable and timely manner." In its Third Advanced Service Report this Commission underscored that it was "encouraged that "the advanced services market continues to grow, and that the availability of and subscribership to advanced telecommunications has increased significantly." This Commission noted that, overall, "the penetration rate of advanced services is generally comparable, or higher, than the historical rates of penetration for other technologies, such as the telephone or television." Further, as the FCC noted in its biannual report on Trends in Telephone Service, broadband lines increased by 36% in the first half of 2001.

Third Advanced Services Report, at ¶ 64.

Third Advanced Services Report, at ¶ 122 ("Content-related applications, however, such as video-on-demand, appear to have some legal barriers to full deployment due to copyright infringement concerns.").

Third Advanced Services Report, at 2, ¶ 89.

Third Advanced Services Report, at 2.

Third Advanced Services Report, at ¶ 124.

⁴⁷ FCC Releases Its Biannual Report, Communications Daily, at 10 (May 23, 2002).

In sum, the Commission did not observe any evidence of the investment disincentive problem postulated by the ILECs in its recent Third Advanced Services Report. To the contrary, the Commission confirmed that "carriers have continued to invest in this sector in a substantial way resulting in increased availability of various high-speed and advanced services platforms for consumers throughout the nation." The ILECs have provided no evidence in their comments in this proceeding that would alter this Commission's conclusion in its recent Third Advanced Services Report.

Far from impeding competition, UNE-based competition from CLECs forced the ILECs to respond and invest in DSL technologies that they left on the shelf for decades so as to avoid cannibalizing their profitable T-1 revenues. CLECs, enabled by UNEs, were the early movers on DSL and have been the prime mover behind recent innovation not the ILECs. This Commission recognized the important role that CLEC competition has played in spurring ILEC investment in advanced services when it observed in its Third Advanced Services Report that "DSL deployment began in response to the 1996 Act and the presence of competitive access providers."

In fact, it has been the CLECs that have led the way in deploying innovative advanced packet-based networks. For example, CTC has deployed its advanced broadband, packet-based network using softswitch technology, called the PowerPath® Network, in areas of

Third Advanced Services Report, at 5, ¶ 61 (emphasis added). Public sources estimate that just one of the available advanced services platforms – ADSL service, "is now available to about 45 percent of U.S. homes, compared to about 25 percent of homes at the end of 1999." Third Advanced Services Report, at ¶ 51. Another platform – high-speed satellite services, "are now available in all 50 states." Third Advanced Services Report, at ¶ 61.

⁴⁹ Third Advanced Services Report, at ¶ 68.

Massachusetts, Rhode Island, New Hampshire, Maine, and New York and plans to extend this innovative packet-based network throughout Verizon's operating footprint in the Northeast and Mid-Atlantic states.⁵⁰ Using this innovative network, CTC is able to offer medium and large business customers a full portfolio of converged on-net voice, data, Internet, and other services at a cost savings over ILEC services that ranges from 15% to 40%. 51 CTC's submission of a patent application for its innovative technologies is the culmination of a substantial and innovative development and integration effort that included an innovative new network architecture, voice services development and IS/IT systems that integrate and "glue" it all together. 52 CTC is deploying its network using a transitional approach in which it deploys fiber to new areas and migrates customers on-net as it gains a critical mass of customers.⁵³ EPN has also invested heavily in its own facilities while relying on ILEC dark fiber to reach many customers. In fact, EPN has invested about \$500 million in equipment, collocation space and its own fiber in Texas.⁵⁴ CTC's and EPN's business models and their ability to continue to their extend their packet-based networks to serve new areas would be significantly impaired if access to unbundled dark fiber loops and transport facilities were denied.⁵⁵

C. The ILECs' UNE Fact Report Is Highly Inaccurate And Over Estimates the Availability of Alternatives to ILEC Unbundled Fiber Facilities

⁵⁰ CTC Communications Now Certified for Local Dial Tone Services in Syracuse, New York, Press Release, June 17, 2002; R. Oliver Declaration, at ¶ 2.

CTC Communications Comments on Recent Industry Announcements By Major Carriers On Deployment of Packet Switching Within Their Networks, Press Release, July 10, 2002; R. Oliver Declaration, at ¶ 3.

⁵² CTC's Integrated Communications System is a New Invention, Press Release, October 22, 2001.

⁵³ R. Oliver Declaration, at 2.

EPN Texas Report, at iii, 5.

⁵⁵ R. Oliver Declaration, at ¶ 4.

In their UNE Fact Report and their Comments, the ILECs attempt to argue that a vibrant competitive market exists for fiber loops and transport, including dark fiber loops and transport. For example, SBC argues that the "evidence of CLEC self-provisioning of transport facilities is overwhelming, and a vibrant wholesale market has emerged as well," and notes that CLECs "have deployed more than 184,000 miles of fiber." This proceeding marks the third time the ILECs have rolled out statistics that purportedly demonstrate that there is a thriving competitive market for high-capacity loop and transport facilities, including dark fiber facilities, and that unbundling obligations for such facilities should either be eliminated or significantly curtailed. In the UNE Remand Order, the Commission unequivocally rejected such arguments. In response to the RBOCs' High Capacity Loops and Transport petition, the Commission took no action. In this proceeding, the Commission should once again unequivocally reject the ILEC arguments and continue to require ILECs to unbundle dark fiber loops and transport because, as demonstrated more fully below, the statistics provided by the ILECs grossly overstate the availability of alternative sources of dark fiber transport and loops, and CLECs have provided convincing evidence that alternatives to dark fiber transport and loops are not sufficiently available to prevent impairment. In light of the evidence, CLECs are clearly entitled to a presumption of impairment in regard to dark fiber transport and loops.

The so-called "facts" of the ILECs' UNE Fact Report are belied by the realities of the marketplace, where many competitive dark fiber providers have entered bankruptcy and others are starved for capital to complete their fiber networks, including many of the competitive providers of dark fiber that the ILECs use to buttress their arguments as to the availability of

⁵⁶ SBC Comments, at 2.

alternative dark fiber loop and transport facilities.⁵⁷ For example, several of the dark fiber providers that the ILECs discuss in their UNE Fact Report have entered bankruptcy proceedings including, but not limited to, Williams Communications,⁵⁸ Global Crossings,⁵⁹ Metromedia Fiber Networks,⁶⁰ and Yipes.⁶¹ Other alternative fiber providers are expected to follow in the wake of damage inflicted upon the industry by the WorldCom accounting scandal.⁶²

Moreover, the ILECs' UNE Fact Report misstates the availability of alternative sources of dark fiber. For example, the ILEC's UNE Fact Report provides that EPN "plans to spend \$2 billion over the next four years on a nationwide fiberoptic network." However, the ILECs fail to mention in the UNE Fact Report that as early as October 25, 2001, it was reported that EPN determined to scale back its national network build out plan, and focus exclusively on providing service in selected large cities in the Texas market rather than deploy a national fiber network as emphasized by the ILECs. The ILECs' UNE Fact Report also shows fiber used by EPN as fiber available to CLECs from an alternative source even where the underlying EPN fiber is actually unbundled fiber obtained from the ILECs. Of course, if EPN were denied the right to

UNE Fact Report, at III-12, III-14, Tables 5 and 7.

Williams Communications to Complete Financial Restructuring and Reduce Debt by Approximately \$6 Billion Through a Negotiated Chapter 11 Filing, Press Release, April 22, 2002.

Simon Romero, J.P. Morgan Cited in Failure of a Global Crossing Bid, N.Y. Times, May 31, 2002 (Global Crossings filed for bankruptcy protection in January 2002).

⁶⁰ Communications Daily, Vol. 22, No. 98, at 7 (May 20, 2002).

⁶¹ Yipes Files for Voluntary Reorganization: Company Commits to Supporting Customers and Services During Restructuring, Press Release, March 22, 2002.

Telecom Industry Polluted by WorldCom Fraud: The Damage Propagated By WorldCom's Disclosure of Financial Deception Last Week Reverberated Across the Telecom Sector, Telephony, at 8 (July 1, 2002).

UNE Fact Report, at III-13, Table 6.

See, e.g., El Paso Will Reduce Focus On Bandwidth Market; Suspends Network Construction, Platts Bandwidth Update (October 25, 2001) ("The Global Networks Unit will 'radically' cut back its investment."); see EPN Texas Report, at 5.

⁶⁵ UNE Fact Report, at III-13.

Comments of El Paso Networks, LLC, And CTC Communications Corp. CC Docket Nos. 01-338, 96-98, 98-147, July 17, 2002

purchase dark fiber from the ILECs, it could not possibly make such fiber available to other CLECs. Further, the UNE Fact Report counts CLEC fiber as part of the available alternative fiber, even though many carriers with fiber networks, such as Time Warner and AT&T, do not make their facilities available to other carriers on a wholesale basis. One of the most important deficiencies of the RBOCs' UNE Fact Report is that, far from constituting a grandular analysis, it reports the availability of fiber at a high level of aggregation of data and obscures the critical question of where and under what terms and conditions is alternative fiber available. As shown more fully below, the ILECs' UNE Fact Report is riddled with such inaccuracies and totally ignores the growing number of bankruptcies and dearth of capital available to competitive providers in an attempt to paint a rosy picture of a robust market for alternative dark fiber loops and transport that simply does not exist. Because the ILECs are not dependent upon competitive alternative dark fiber providers, their statistics do not accurately depict the quest for dark fiber in the real world as described in the EPN Texas Report (Attachment A herein).

In contrast to the ILECs' flimsy claims regarding a robust competitive market, the Dark Fiber Commenters provide real world experience demonstrating the lack of competitive alternatives to ILEC dark fiber loops and transport. For example, EPN has been in the trenches since 1999 searching for alternative sources of dark fiber. EPN has found that such fiber is generally only available in large collocation hotels and on a few select routes in large metropolitan areas.⁶⁸ For example, in EPN's principal markets in Texas, EPN has determined that as a practical matter the maximum number of buildings with available alternative dark fiber

⁶⁶ EPN Texas Report, at 3, 12, 14-15, 17.

⁶⁷ EPN Texas Report, at 8, 10-23.

⁶⁸ EPN Texas Report, at iii, 10-23.

is as follows: Dallas-Fort Worth 36, Austin 10, Houston 21, and San Antonio 9.⁶⁹ Most importantly, the buildings served by alternative fiber in these four cities are overwhelmingly concentrated in the central business district, ⁷⁰ whereas ILEC fiber extends to buildings throughout these metropolitan areas. In sharp contrast to the limited number of buildings served by alternative fiber providers, the number of buildings with fiber provisioned by SBC is much greater; for example, it is currently estimated that over 3700 buildings are served by SBC fiber in these four cities.⁷¹ The findings of the EPN Texas Report regarding the limited number of buildings served by CLEC fiber are confirmed by the CGC Study. The CGC Study, for example, determined that in Corpus Christi, Texas, only 18 buildings were connected with CLEC fiber out of 7,390 establishments in the MSA.⁷² The CGC Study also determined that in the cities examined in the Study, including Albany, Augusta, Boston, Chicago, Corpus Christi, and Portland, none of the CLECs studied in these markets offered dark fiber or wholesale fiber loops for sale or lease to other CLECs.⁷³

Similarly, CTC has found that alternatives to dark fiber transport provided by the ILEC are most often simply not available. For example, CTC has been unable to obtain dark fiber from alternative providers for many of its critical routes, including the Manchester to Dover route in New Hampshire.⁷⁴ CTC engaged in extensive discussions with Fiber Technologies and Revenets, the only two companies that showed any interest, to obtain dark fiber along this

⁶⁹ EPN Texas Report, at iv, 10-23.

⁷⁰ EPN Fact Report, at 13-14, Attachments I-II.

⁷¹ EPN Fact Report, at iv.

⁷² CCG Consulting, State of CLEC Competition, at 6-7, Table 3 July 17, 2002 ("CGC Study").

⁷³ CGC Study, at 7, Table 3.

⁷⁴ R. Oliver Declaration, at ¶ 4.

route.⁷⁵ Revenets declined to build the needed fiber. Fiber Technologies showed some initial interest in building fiber along the route, however, in the end Fiber Technologies decided not to deploy fiber along this route.⁷⁶ CTC considered self-provisioning fiber along this route, however, due to the estimated cost of \$100,000 to \$300,000 per mile⁷⁷ of deploying fiber this alternative was deemed infeasible in light of estimated demand, lack of economies of scale, and capital constraints.⁷⁸ Without access to Verizon dark fiber along this route CTC would not have been able to establish a diverse path in order to extend its innovative, packet-based PowerPath® Network to New Hampshire, and the reliability of CTC's Maine network would be reduced.⁷⁹

If the Commission were to completely eliminate or limit unbundling obligations for dark fiber loops and transport on the premise that there are competitive dark fiber alternatives to some locations and between some points, as suggested by the ILECs, the Commission would essentially freeze competition at current levels. As shown below, the mere fact that *some* CLECs have managed to deploy *some* fiber loops to large businesses in *some* circumstances in *some* urban areas, is not remotely sufficient to establish that CLECs can generally deploy fiber loops. Indeed, EPN's market experience demonstrates that there are only rare and exceptional circumstances in which CLECs can install fiber loops because of the economies of scale that characterize these facilities and the rights of way, building access, and other first mover

⁷⁵ R. Oliver Declaration, at ¶ 4.

R. Oliver Declaration, at ¶ 4.

Broadslate/Network Plus/RCN/Telergy/ High Cap Comments, at 19.

⁷⁸ R. Oliver Declaration, at ¶ 4.

⁷⁹ R. Oliver Declaration, at ¶ 4.

Comments of BellSouth Corporation, CC Dockets No. 01-338, 96-98, 98-147 at 22-23, 26 (April 5, 2002) ("Bell South Comments") ("It is clear that a carrier's self-provisioning or alternative procurement of elements outside of the ILEC network, in and of itself, proves that requesting carriers are not impaired without access to ILEC elements in those specific geographic and customer markets."); see, Verizon Comments, at 22-23, 42-43.

Comments of El Paso Networks, LLC, And CTC Communications Corp. CC Docket Nos. 01-338, 96-98, 98-147, July 17, 2002

advantages that ILECs enjoy because of their monopolies.⁸¹ The Commission already rejected this ILEC argument in the *UNE Remand Order*, and concluded:

Using a sports metaphor, the ILEC argument is that since Tiger Woods has scored a 59 in a round of golf on an occasion, no one else is impaired from performing the same feast. Indeed, the ILEC argument fails even the most basic test of logic.

Given current CLEC financial situations and closed capital markets, the likelihood of competitive fiber routes increasing is limited at best for the short term, and perhaps for several more years. Thus, without unbundled access to dark fiber loops and transport, CLECs would be unable to expand their networks to serve new customers or central offices. What is worse, the Commission may be imperiling the very facilities-based competition that has already developed. CTC, for example, would not be able to continue on-net operations in New Hampshire using diverse paths without continued access to Verizon's unbundled dark fiber. 83

This, in a nutshell, is why even if the Commission finds the ILEC facts to be true, which they are not, the Commission must still continue to require the unbundling of dark fiber. Abandoning dark fiber loops and transport at this point would either freeze competition, or strangle it, with the latter scenario being more likely. The Act, as interpreted and applied by the Commission, envisioned competitive networks being deployed over a number of years. Six

EPN Texas Report, at 30-40; Comments of AT&T Corp., CC Dockets No. 01-338, 96-98, 98-147 at 23 (April 5, 2002) ("AT&T Comments").

UNE Remand Order, at ¶ 184.

⁸³ R. Oliver Declaration, at ¶ 4.

years is too short a time frame for competitive providers to deploy fiber facilities that match the ubiquity of ILEC facilities that were deployed in a monopoly environment. CLECs are still impaired, and will continue to be impaired, without access to unbundled dark fiber loops and transport. For this reason, the Commission should establish a presumption that CLECs are materially impaired in their ability to provide services without access to unbundled must dark fiber loops and transport.

III. SECTION 251(D)(2) IMPAIR STANDARD ANALYSIS FOR DARK FIBER LOOPS AND TRANSPORT

A. CLECs Are Presumptively Materially Impaired In Their Ability to Provide Services Without Access to Unbundled Dark Fiber Loops

1. Dark Fiber Loops Are Tantamount To An Essential Facility

If there is a paradigmatic, hard to duplicate, "essential" facility, it would have to be the loop, including dark fiber loops. In fact, the Commission recently noted that the loop is "an element that is widely agreed to have natural monopoly characteristics." The Commission, not even two years ago, noted "competitors often are totally dependent on incumbent LECs for last mile wireline access to end users."

Moreover, the Supreme Court and the Commission have recognized that ILEC control over the "last mile" local loop provides ILECs with a nearly insurmountable advantage and that duplication of the ILEC's ubiquitous loop facilities by CLECs is impractical at least in the near term. Specifically, the Supreme Court observed that ILEC control over the local loop

United States Telecom Ass'n v. FCC, Docket Nos. 00-1012, 00-1015, FCC Petition for Rehearing, at 12 (July 8, 2002) ("FCC Petition for Rehearing").

Application of GTE Corporation, Transferor, and Bell Atlantic Corp., Transferee, For Consent to Transfer Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License, CC Docket No. 98-184, Memorandum Opinion and Order, FCC 00-221, ¶ 181 (June 16, 2000).